

**Work Order ID 70467**

Thursday, June 09, 2011 7:55:44 AM



Page 1

Item ID: D206-642-541

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 6/9/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/20/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 11-06-9

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
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|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

Draw Nbr

Revision Nbr

D3274

D

IIN-D206-642

Rev M

100

0.00



DOCUMENT CONTROL

DC

0.00

Memo

Document Control

Photocopy bluefile &amp; type labels per PPP D206-642-541 CHG003

N/A

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

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Cust Item ID:

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Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

110

0.00



Skidtubes

Skidtubes

**Memo**

0.00

\*\*\*\*VERIFY AND INSPECT THE MATERIAL PRIOR TO USE\*\*\*\*

1- Bend FWD end of tube using bend prog D3274 FWD and foil 10 as per dwg D3274, cut fwd end of tube with saw table setup D3274.

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding

3- weld fwd cap as per dwg D3274 and OS1004  
AR Aluminum Rod Batch: M112860

4- grind fwd cap weld on top surface only

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

6-Drill Aft cap pilot hole using DT8025

7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D.  
Drill 3/16" pilot holes as per Dwg D3274

8 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

11-7-29  
DL 11/08/04  
BE 11/08/05  
DL 11/08/08

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

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Item Name: Replacement Skidtube

Start Date: 6/9/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/20/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

| Sequence ID/<br>Work Center ID          | Operation<br>Description                                  | Set Up/<br>Run Hours | Tool ID | Tool #    | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|---|---|----------------------|---------|-----------|--------------|---------------|---------------|------------------|----------------|
| 114<br><br>QC<br>Quality Control        | QC5- Inspect part completeness to step on W/O<br><br>Memo | 0.00<br>0.00         |         |           |              |               |               |                  |                |
|   |   |                      |         | 8 wloslog |              |               |               |                  |                |
| 116<br><br>QC<br>Quality Control        | QC10- Inspect visual per QSI004- ground welds<br><br>Memo | 0.00<br>0.00         |         |           |              |               |               |                  |                |
|   |   |                      |         | 8 wloslog |              |               |               |                  |                |
| 120<br><br>HandFinish<br>Hand Finishing | Chemical Conversion Coat per QSI005 4.1<br><br>Memo       | 0.00<br>0.00         |         |           |              |               |               |                  |                |
|   |   |                      |         | 11.08.10  |              | 1             | 0             |                  |                |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

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Start Date: 6/9/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/20/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 0 BRU/06/11

150

Skidtubes

0.00



Skidtubes

Memo

0.00

Skidtubes

1-Open Ø0.313" and 0.375" crossbolt spacer holes as per Dwg D3274

2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube

3-Bond web in place as per Dwg D3274 & QSI 015.

A/R ☐ Sikaflex-291 ☐ 117516 ☐

Sikaflex expire date: ☐ 12/01/15 ☐

Start: ☐ 3:00 ☐ Time: ☐ 11/08/11

Finish: ☐ 2:30 ☐ Time: ☐ 11/09/11

(Adhere for 12 hours)

32 11/08/11

BB 11/08/29

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

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|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



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Customer:

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Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

1 2 BEU/09/06

170

Skidtubes

0.00



Skidtubes

Memo

0.00

Skidtubes

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.

2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2  
OPEN HOLES TO .297" . Deburr

3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD  
END OF TUBE  
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)  
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding

BEU/09/06

BEU/09/07

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

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Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00 h? 3.04

0.00 L 2 4.5

S 4/09/07



Memo

190



Skidtubes

Skidtubes

Skidtubes

0.00

0.00

Memo

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod  
A/R ☐ Aluminum Rod ☒ M2860 BE-11/09/13

3-Grind cross bolt welds flush as per Dwg D3274.

4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 and deburr.

S 4/09/14

**Dart Aerospace Ltd**

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

**Part No:** \_\_\_\_\_ **PAR #:** \_\_\_\_\_ **Fault Category:** \_\_\_\_\_ **NCR:** Yes No **DQA:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Resolution:** \_\_\_\_\_ **Disposition:** \_\_\_\_\_ **QA: N/C Closed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

Thursday, June 09, 2011 7:55:44 AM

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| 1. Name of the person who submitted the report  | 2. Name of the person who received the report   |
| 3. Date of the report                           | 4. Time of the report                           |
| 5. Location of the report                       | 6. Name of the person who submitted the report  |
| 7. Name of the person who received the report   | 8. Date of the report                           |
| 9. Time of the report                           | 10. Location of the report                      |
| 11. Name of the person who submitted the report | 12. Name of the person who received the report  |
| 13. Date of the report                          | 14. Time of the report                          |
| 15. Location of the report                      | 16. Name of the person who submitted the report |
| 17. Name of the person who received the report  | 18. Date of the report                          |
| 19. Time of the report                          | 20. Location of the report                      |
| 21. Name of the person who submitted the report | 22. Name of the person who received the report  |
| 23. Date of the report                          | 24. Time of the report                          |
| 25. Location of the report                      | 26. Name of the person who submitted the report |
| 27. Name of the person who received the report  | 28. Date of the report                          |
| 29. Time of the report                          | 30. Location of the report                      |
| 31. Name of the person who submitted the report | 32. Name of the person who received the report  |
| 33. Date of the report                          | 34. Time of the report                          |
| 35. Location of the report                      | 36. Name of the person who submitted the report |
| 37. Name of the person who received the report  | 38. Date of the report                          |
| 39. Time of the report                          | 40. Location of the report                      |
| 41. Name of the person who submitted the report | 42. Name of the person who received the report  |
| 43. Date of the report                          | 44. Time of the report                          |
| 45. Location of the report                      | 46. Name of the person who submitted the report |
| 47. Name of the person who received the report  | 48. Date of the report                          |
| 49. Time of the report                          | 50. Location of the report                      |
| 51. Name of the person who submitted the report | 52. Name of the person who received the report  |
| 53. Date of the report                          | 54. Time of the report                          |
| 55. Location of the report                      | 56. Name of the person who submitted the report |
| 57. Name of the person who received the report  | 58. Date of the report                          |
| 59. Time of the report                          | 60. Location of the report                      |
| 61. Name of the person who submitted the report | 62. Name of the person who received the report  |
| 63. Date of the report                          | 64. Time of the report                          |
| 65. Location of the report                      | 66. Name of the person who submitted the report |
| 67. Name of the person who received the report  | 68. Date of the report                          |
| 69. Time of the report                          | 70. Location of the report                      |
| 71. Name of the person who submitted the report | 72. Name of the person who received the report  |
| 73. Date of the report                          | 74. Time of the report                          |
| 75. Location of the report                      | 76. Name of the person who submitted the report |
| 77. Name of the person who received the report  | 78. Date of the report                          |
| 79. Time of the report                          | 80. Location of the report                      |
| 81. Name of the person who submitted the report | 82. Name of the person who received the report  |
| 83. Date of the report                          | 84. Time of the report                          |
| 85. Location of the report                      | 86. Name of the person who submitted the report |
| 87. Name of the person who received the report  | 88. Date of the report                          |
| 89. Time of the report                          | 90. Location of the report                      |
| 91. Name of the person who submitted the report | 92. Name of the person who received the report  |
| 93. Date of the report                          | 94. Time of the report                          |
| 95. Location of the report                      | 96. Name of the person who submitted the report |
| 97. Name of the person who received the report  | 98. Date of the report                          |
| 99. Time of the report                          | 100. Location of the report                     |

**Customer:**

**Required Date: 6/20/2011      Req'd Qty: 1.00**

[illegible]

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

**Insp.  
Stamp**

8 u609/15



## Memo

0.00

0.00

8 ulos/15

[illegible]

## Memo

0.00

0.00

IX Øm. 21/09/15

[illegible]

HandFinish

## Memo

0.00

## Hand Finishing

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Work Order ID 70467

Thursday, June 09, 2011 7:55:44 AM



Item ID: D206-642-541

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 6/9/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/20/2011 Req'd Qty: 1.00

Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

230

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Powder Coating

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

11:45  
320 OF  
12:15

0.00

1X Ø M-11/09/15

240

QC3- Inspect Part Finish

0.00



QC

Quality Control

Memo

0.00

1 BR 11-9-15.

250

HandFinishing

0.00



HandFinish

Hand Finishing

Memo

1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.

A/R ☐ N/A ☐ LPS-3 ☐

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a

A/R ☐ ☐ Sikaflex-291 ☐

Sikaflex expire date:

114596  
11848  
12-5

1 BR 11-9-15.

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



**Work Order ID 70467**

Thursday, June 09, 2011 7:55:44 AM



Page 9

Item ID: D206-642-541

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 6/9/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/20/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

260

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Inspect Nut Plate &amp; Inserts

Suborles



270

HAND FINISHING RESOURCE #1

0.00



HandFinish

Memo

0.00

Hand Finishing

1-Install wearpads &amp; gaskets as per Dwg D3274.

2-Install ring as per Dwg D3274

A/R ☐ Sikaflex-291 ☐ 118393Sikaflex expire date: ☐ 12-5

3-Inspect for foreign objects as per QSI 024

4-Spray inside of tube on both sides of web with LPS-3

A/R LPS-3 Batch: 11/12

5-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R ☐ Sikaflex-291 ☐ 118393Sikaflex expire date: ☐ 12-5

APPLY PROCTON BATH 114596.

1 BR 11-9-16

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 70467**

Thursday, June 09, 2011 7:55:44 AM



Page 10

Item ID: D206-642-541

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 6/9/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/20/2011 Req'd Qty: 1.00

Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

| Sequence ID/<br>Work Center ID    | Operation<br>Description                                  | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|-----------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 280<br><br>QC<br>Quality Control  | QC5- Inspect part completeness to step on W/O<br><br>Memo | 0.00<br>0.00         |         |        |              |               |               |                  |                |
| 290<br><br>Packaging<br>Packaging | Identify as per dwg & Stock Location: _____<br><br>Memo   | 0.00<br>0.00         |         |        |              |               |               |                  |                |
| 300<br><br>QC<br>Quality Control  | QC21- Final Inspection - Work Order Release<br><br>Memo   | 0.00<br>0.00         |         |        |              |               |               |                  |                |

11/9/27  
MF 11-09-22

**Dart Aerospace Ltd**

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, June 09, 2011 7:55:51 AM

Page 1

Work Order ID: 70467

Parent Item: D206-642-541

Parent Item Name: Replacement Skidtube



Start Date: 6/9/2011

Required Date: 6/20/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B 05.09.23 Revised per D206-642 Rev. J KJ/JLM  
 IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM  
 IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD  
 IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC  
 IPP Rev:F 08-06-02 add comment DD verified by:EC  
 IPP Rev:G 08-10-09 revise details DD verified by:EC

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit     | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-----------------|--------------|---------------|----------------|--------|
| D2600-1-190<br>                 |                        | Manufactured  | No          |                     |                  | 110             | Each               | 34.4000        | 1               | 1            |               |                |        |
| Extrusion Round 3" 206          |                        |               |             |                     |                  |                 |                    |                |                 |              |               |                |        |
|                                 |                        |               |             | <u>Location</u>     |                  |                 |                    | <u>Loc Qty</u> | <u>Loc Code</u> |              |               |                |        |
|                                 |                        |               |             | HALL                |                  |                 |                    | 34.4           |                 |              |               |                |        |
|                                 |                        |               |             | 59874               |                  |                 |                    | 34.4           |                 |              |               |                |        |
| D3285-1<br>                     |                        | Manufactured  | No          |                     |                  | 110             | Each               | 105.0000       | 1               | 1            |               |                |        |
| Cap                             |                        |               |             |                     |                  |                 |                    |                |                 |              |               |                |        |
|                                 |                        |               |             | <u>Location</u>     |                  |                 |                    | <u>Loc Qty</u> | <u>Loc Code</u> |              |               |                |        |
|                                 |                        |               |             | LG002               |                  |                 |                    | 105            |                 |              |               |                |        |
|                                 |                        |               |             | 52511               |                  |                 |                    | 58             |                 |              |               |                |        |
|                                 |                        |               |             | 52647               |                  |                 |                    | 47             |                 |              |               |                |        |
| D3282-041<br>                   |                        | Manufactured  | No          |                     |                  | 150             | Each               | 1.0000         | 1               | 1            |               |                |        |
| Float Web (206L/407)            |                        |               |             |                     |                  |                 |                    |                |                 |              |               |                |        |
|                                 |                        |               |             | <u>Location</u>     |                  |                 |                    | <u>Loc Qty</u> | <u>Loc Code</u> |              |               |                |        |
|                                 |                        |               |             | LG                  |                  |                 |                    | 1              |                 |              |               |                |        |
|                                 |                        |               |             | 66363               |                  |                 |                    | 1              |                 |              |               |                |        |

DD 11-7-29  
 BE 11/08/15

1  
 1

72838

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, June 09, 2011 7:55:51 AM

Work Order ID: 70467

Parent Item: D206-642-541

Parent Item Name: Replacement Skidtube

Start Date: 6/9/2011

Required Date: 6/20/2011

Start Qty: 1.00

Required Qty: 1.00

D2649 Manufactured No 190 Each 245.0000 12 12



Cross Bolt Spacer



BE 11/09/13

B 72704 x4  
B 73390 x8

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| LG       | 233     |          |
| 68224    | 40      |          |
| 70394    | 193     |          |
| LG001    | 12      |          |
| 65317    | 1       |          |
| 68507    | 11      |          |

D3275-1 Manufactured No 190 Each 214.0000 12 12



Crossbolt Spacer



BE 11/09/13

B 72123 x12

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| LG       | 34      |          |
| 67767    | 34      |          |
| LG002    | 180     |          |
| 66930    | 108     |          |
| 68946    | 72      |          |

CR3212-4-03 Purchased No 250 Each 1,232.000 2 2



Cherry Rivet



BR 11-9-16.

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP-B     | 2       |          |
| 110139   | 2       |          |
| ST311    | 1230    |          |
| 114859 ✓ | 1230    |          |

2

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



# Picklist Print

Thursday, June 09, 2011 7:55:51 AM

Work Order ID: 70467

Parent Item: D206-642-541


Parent Item Name: Replacement Skidtube

Start Date: 6/9/2011


Required Date: 6/20/2011

Start Qty: 1.00


Required Qty: 1.00

D3415-041 Manufactured No 250 Each 62.0000 1 1  
  
 Nut Plate BR 11-9-16.


| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST053    | 62      |          |
| 33842 ✓  | 18      |          |
| 67605    | 44      |          |

CCR264SS3-3 Purchased No 250 Each 585.0000 2 2  
  
 Cherry Rivet BR 11-9-16.

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP-B     | 2       |          |
| 113973   | 2       |          |
| ST311    | 583     |          |
| 117086 ✓ | 83      |          |
| 117849   | 500     |          |

ALS4-1032-130 Purchased No 250 Each 1,722.000 78 78  
  
 Insert BR 11-9-16.

| Location       | Loc Qty | Loc Code |
|----------------|---------|----------|
| ST281 118312.. | 8       |          |
| 117331         | 8       |          |
| ST282          | 1714    |          |
| 117717         | 1714    |          |

D3536-15 Manufactured No 270 Each 17.0000 1 1  
  
 Gasket BR 11-9-16.

| Location     | Loc Qty | Loc Code |
|--------------|---------|----------|
| FP011 728481 | 17      |          |
| 66559        | 17      |          |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, June 09, 2011 7:55:52 AM

Work Order ID: 70467

Parent Item: D206-642-541

Parent Item Name: Replacement Skidtube

Start Date: 6/9/2011

Required Date: 6/20/2011

Start Qty: 1.00

Required Qty: 1.00

D3536-23 Manufactured No

270 Each

15.0000

1

1



Gasket



BL 11-9-16.

Location

Loc Qty

Loc Code

FP011 69902

15

43406

1

66560

14

D3536-35 Manufactured No

270 Each

29.0000

1

1



Gasket



BL 11-9-16.

Location

Loc Qty

Loc Code

FP012 71587

29

67599

3

69755

26

D3536-39 Manufactured No

270 Each

35.0000

1

1



Gasket



BL 11-9-16.

Location

Loc Qty

Loc Code

FP015

35

66241

9

69760 ✓

26

D3535-15 Manufactured No

270 Each

27.0000

1

1



Wearshoe



BL 11-9-16.

Location

Loc Qty

Loc Code

FP018

27

66558

7

68358

6

69931 ✓

14

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, June 09, 2011 7:55:52 AM

Work Order ID: 70467

Parent Item: D206-642-541


Parent Item Name: Replacement Skidtube

Start Date: 6/9/2011


Required Date: 6/20/2011

Start Qty: 1.00


Required Qty: 1.00

D3535-35      Manufactured      No      270      Each      32.0000      1      1  
  
 Wearshoe


| <u>Location</u>    | <u>Loc Qty</u> | <u>Loc Code</u> |
|--------------------|----------------|-----------------|
| FP018 <b>70815</b> | 12             | 1               |
| 65926              | 1              |                 |
| 67598              | 1              |                 |
| 68348              | 10             |                 |
| ST                 | 20             |                 |
| 69756              | 20             |                 |

D3535-39      Manufactured      No      270      Each      19.0000      1      1  
  
 Wearshoe

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| FP018           | 19             |                 |
| 64076           | 6              |                 |
| 69759 ✓         | 13             | 1               |

D3535-23      Manufactured      No      270      Each      22.0000      1      1  
  
 Wearshoe

| <u>Location</u>    | <u>Loc Qty</u> | <u>Loc Code</u> |
|--------------------|----------------|-----------------|
| FP021 <b>70813</b> | 22             | 1               |
| 66236              | -1             |                 |
| 67594              | 10             |                 |
| 68342              | 13             |                 |

D3537-3      Manufactured      No      270      Each      1.0000      1      1  
  
 Wearpad

| <u>Location</u>    | <u>Loc Qty</u> | <u>Loc Code</u> |
|--------------------|----------------|-----------------|
| FP017 <b>B2144</b> | 1              | 1               |
| 35697              | 1              |                 |

Thursday, June 09, 2011 7:55:52 AM

Shop Packet Print

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

**Part No:** \_\_\_\_\_ **PAR #:** \_\_\_\_\_ **Fault Category:** \_\_\_\_\_ **NCR:** Yes No **DQA:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Resolution:** \_\_\_\_\_ **Disposition:** \_\_\_\_\_ **QA: N/C Closed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, June 09, 2011 7:55:52 AM

Work Order ID: 70467

Parent Item: D206-642-541

Parent Item Name: Replacement Skidtube

Start Date: 6/9/2011

Required Date: 6/20/2011

Start Qty: 1.00

Required Qty: 1.00

D3537-1  
Wearpad  
Manufactured No

270 Each

60.0000 9 9



BR 11-9-16

Location

Loc Qty

Loc Code

FP017

70687  
69817

60

60

9

AN960C10L  
washer  
NAS1149C0332 R ✓ Purchased

No

270 Each

0.0000 80 80



80

BR 11-9-16

118354

AN960C416  
washer  
NAS1149C0463 R ✓ Purchased

No

270 Each

0.0000 1 1



1

BR 11-9-16

117735

D3672-1  
Phenolic Washer  
Manufactured No

270 Each

1,178.000 2 2



BR 11-9-16

Location

Loc Qty

Loc Code

ST074

1152

64177

652

66821 ✓

500

2

ST077

26

52505

26

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

**Part No:** \_\_\_\_\_ **PAR #:** \_\_\_\_\_ **Fault Category:** \_\_\_\_\_ **NCR:** Yes No **DQA:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Resolution:** \_\_\_\_\_ **Disposition:** \_\_\_\_\_ **QA: N/C Closed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



# Picklist Print

Thursday, June 09, 2011 7:55:53 AM

Work Order ID: 70467



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 6/9/2011

Required Date: 6/20/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C4A Purchased No 270 Each 2,015.000 80 80



*BR 11-9-16*

BOLT

| Location            | Loc Qty | Loc Code |
|---------------------|---------|----------|
| ST350 <i>118628</i> | 2015    | 80       |
| 117094              | 513     |          |
| 117313              | 2       |          |
| 117688              | 800     |          |
| 117795              | 500     |          |
| 117872              | 200     |          |

AN4C5A Purchased No 270 Each 521.0000 1 1



*BR 11-9-16*

BOLT

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP-B     | 110     |          |
| 112243 ✓ | 110     | <i>1</i> |
| ST345    | 411     |          |
| 112243   | 411     |          |

D2646 Manufactured No 270 Each 25.0000 1 1



*BR 11-9-16*

Aft Cap

| Location           | Loc Qty | Loc Code |
|--------------------|---------|----------|
| FP006 <i>71070</i> | 24      | <i>1</i> |
| 62678              | 24      |          |
| FP-4               | 1       |          |
| 69019              | 1       |          |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, June 09, 2011 7:55:53 AM

Work Order ID: 70467



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 6/9/2011

Required Date: 6/20/2011

Start Qty: 1.00

Required Qty: 1.00

D3413-1

Manufactured

No

270

Each

25.0000

1

1



Ring

BL 11-9-16.

Location

Loc Qty

Loc Code

ST420

70773

19

62961

8

66387

11

ST473

6

66945

6

1

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY

**DART**

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 704167

RELEASED

07.02.12

DEO ATTACHED

|                  |                |  |                        |
|------------------|----------------|--|------------------------|
| DESIGN<br>CP     | DRAWN BY<br>PH | DART AEROSPACE USA, INC.<br>PORT HADLOCK, WA |                        |
| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>D3274                         | REV. D<br>SHEET 1 OF 4 |
| DATE<br>06.12.19 |                | TITLE<br>SKIDTUBE ASSEMBLY                   | SCALE<br>NTS           |
| A                | 04.03.15       | NEW ISSUE                                    |                        |
| B                | 04.08.09       | MOVE SADDLE HOLE: 42.14 WAS 42.76            |                        |
| C                | 05.03.16       | ADD -043; NEW INSERTS                        |                        |
| D                | 06.12.19       | NEW INSERTS, SS WEARSHOE + GASKET            |                        |

| Qty<br>-041 | Qty<br>-043 | Part Number   | Description   |
|-------------|-------------|---------------|---|
| X           |             | D3274-041     | SKIDTUBE ASSEMBLY                                       |
|             | X           | D3274-043     | SKIDTUBE ASSEMBLY                                       |
| 1           | 1           | D2600-1-240   | EXTRUSION   |
| 1           | 1           | D2646         | AFT CAP   |
| 12          | 12          | D2649         | CROSS BOLT SPACER                                       |
| 12          | 37          | D3275-1       | CROSS BOLT SPACER                                       |
| 1           | 1           | D3282-041     | FLOAT WEB   |
| 1           | 1           | D3285-1       | CAP   |
| 1           | 1           | D3413-1       | RING  |
| 1           | 1           | D3415-041     | NUT PLATE   |
| 1           | 1           | D3535-15      | WEARSHOE  |
| 1           | 1           | D3535-23      | WEARSHOE  |
| 1           | 1           | D3535-35      | WEARSHOE  |
| 1           | 1           | D3535-39      | WEARSHOE  |
| 1           | 1           | D3536-15      | GASKET  |
| 1           | 1           | D3536-23      | GASKET  |
| 1           | 1           | D3536-35      | GASKET  |
| 1           | 1           | D3536-39      | GASKET  |
| 9           | 9           | D3537-1       | WEARPAD   |
| 1           | 1           | D3537-3       | WEARPAD   |
| 78          | 78          | ALS7-1032-130 | INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130) |
| 80          | 80          | AN3C4A        | BOLT  |
| 1           | 1           | AN4C5A        | BOLT  |
| 1           | 1           | AN960C416     | WASHER  |
| 80          | 80          | AN960C10L     | WASHER  |
| 2           | 2           | CCR264SS3-3   | RIVET   |
| 2           | 2           | CR3212-4-03   | RIVET   |
| 2           | 2           | NAS1515H3L    | WASHER  |

**GENERAL NOTES:**

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1  
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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**Dart Aerospace Ltd**

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

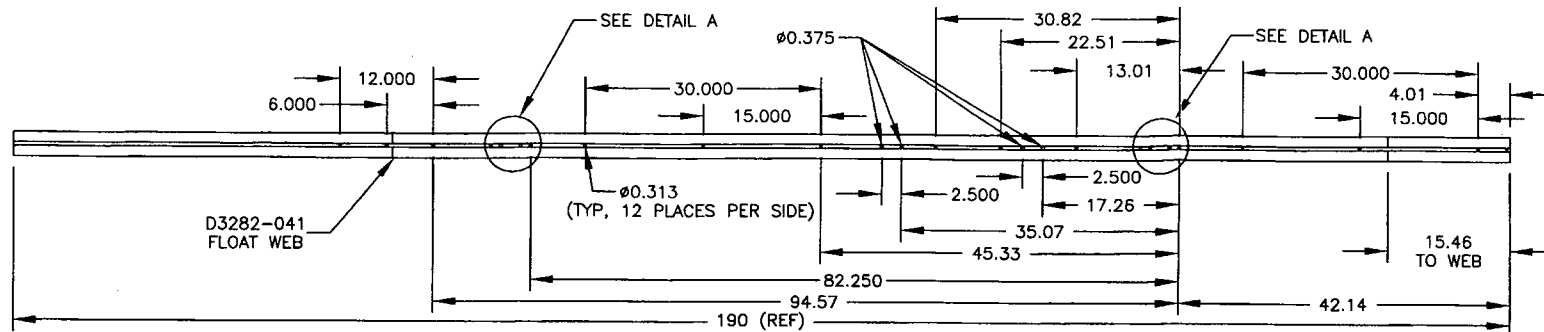
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

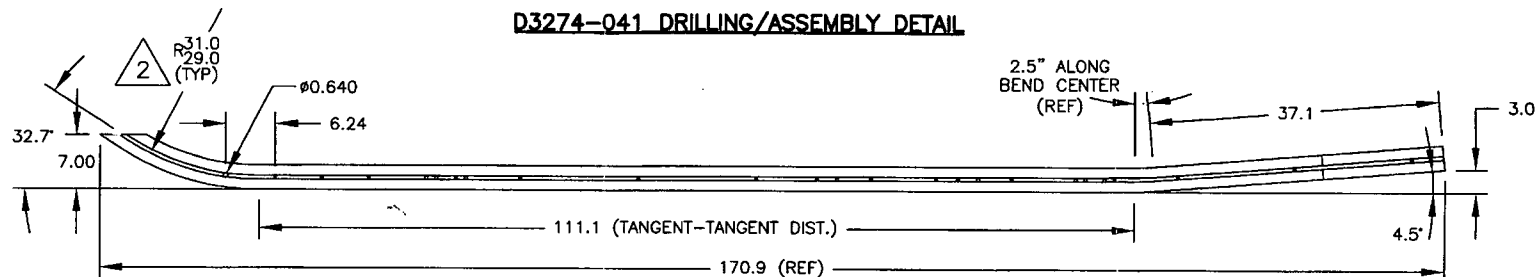
**NOTE:** Date & initial all entries

DEO ATTACHED

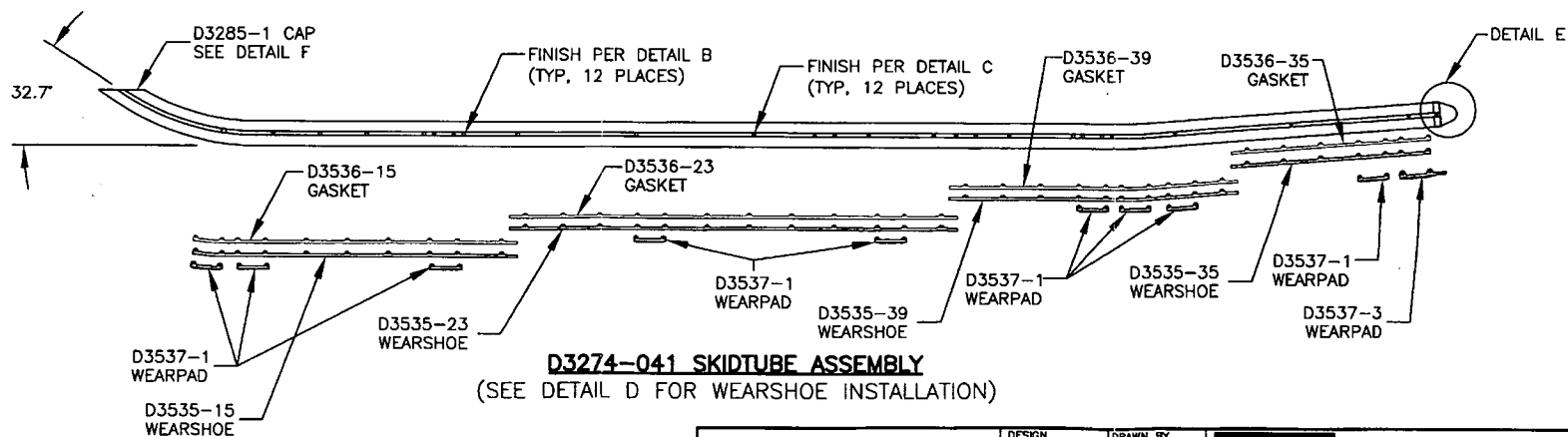
w/o 70467



**D3274-041 DRILLING/ASSEMBLY DETAIL**



**D3274-041 BEND/DRILLING DETAIL**



**D3274-041 SKIDTUBE ASSEMBLY**  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

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|         |          |             |                   |                                      |
|---------|----------|-------------|-------------------|--------------------------------------|
| DESIGN  | CP       | DRAWN BY    | PH                | <b>DART</b> DART AEROSPACE USA, INC. |
| CHECKED | #        | APPROVED    | #                 | PORT HADLOCK, MA                     |
| DATE    | 06.12.19 | DRAWING NO. | D3274             | REV. D                               |
|         |          | TITLE       | SKIDTUBE ASSEMBLY | SHEET 2 OF 4                         |
|         |          |             |                   | SCALE 1:15                           |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

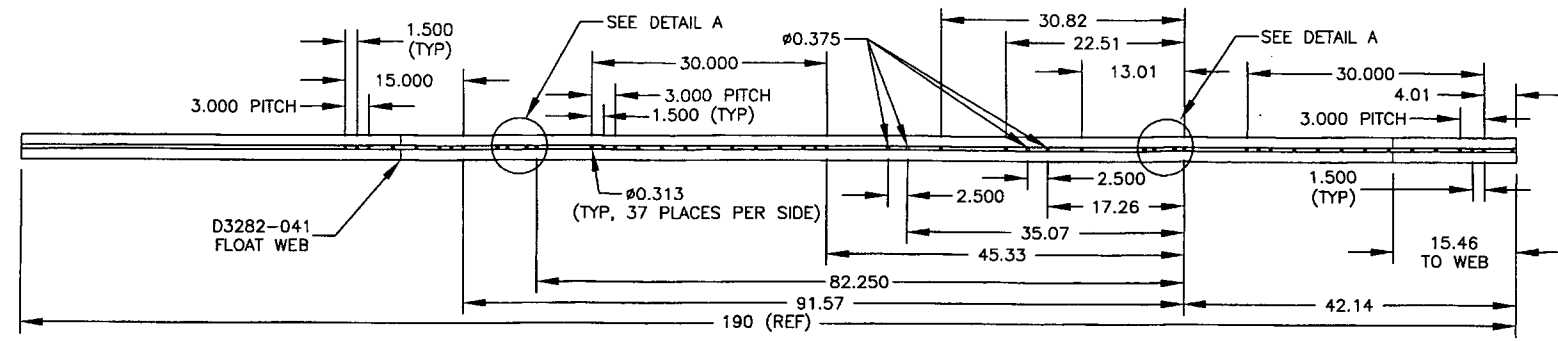
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

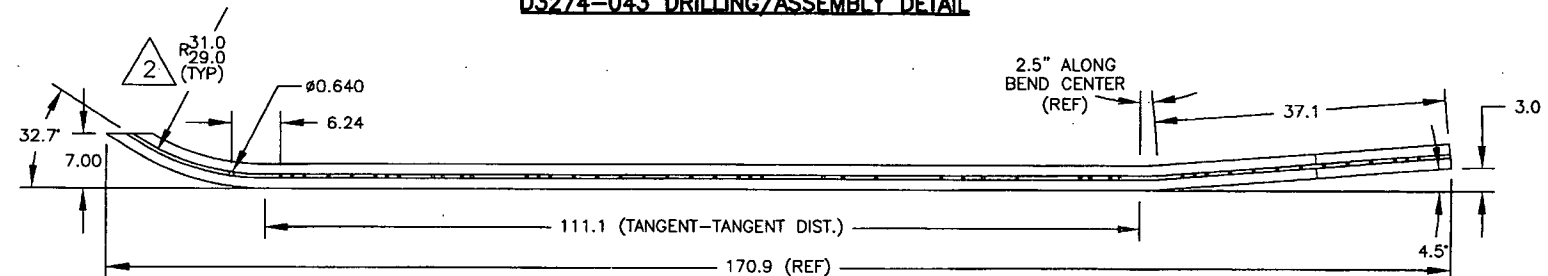


w/o 70447

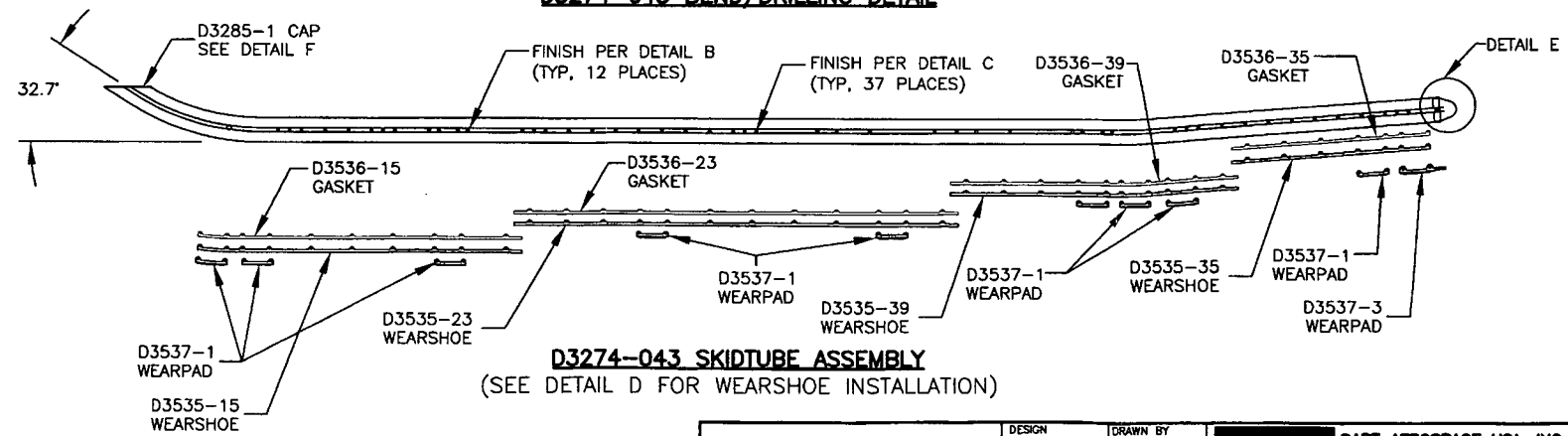
DEO ATTACHED



**D3274-043 DRILLING/ASSEMBLY DETAIL**



**D3274-043 BEND/DRILLING DETAIL**



**D3274-043 SKIDTUBE ASSEMBLY**  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED  
07.02.12

|   |  |         |          |          |    |  |                        |
|---|--|---------|----------|----------|----|--|------------------------|
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|   |  | DATE    | 06.12.19 | TITLE    |    | SKIDTUBE ASSEMBLY  | SCALE<br>1:15          |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

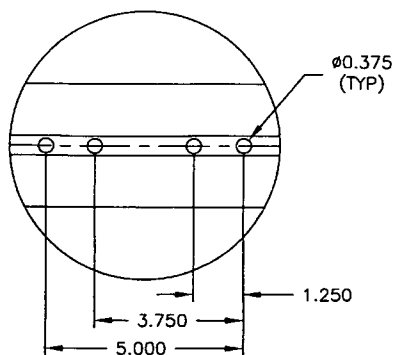
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

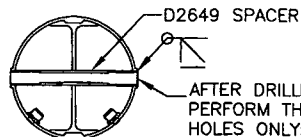
**NOTE:** Date & initial all entries

W/O 70467

# **DETAIL A: DRILL DETAIL**

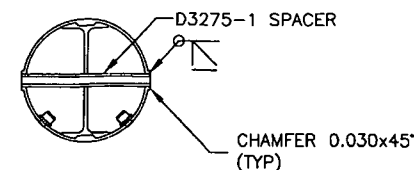


# **DETAIL B** FOR 0.375 HOLES ONLY

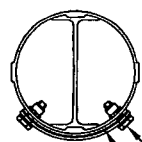


- AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR 0.375  
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
  2. INSERT D2649 SPACER
  3. WELD INTO PLACE AND GRIND FLUSH
  4. C'BORE TO 0.313x0.75 DEEP

# **DETAIL C** FOR 0.313 HOLES ONLY



# **DETAIL D**

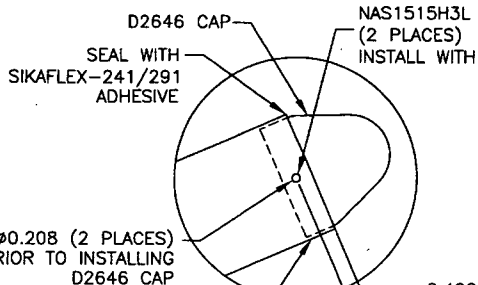


- ALS7-1032-130 INSERT (1)  
AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
(78 PLACES)

GASKET/WEARSHOE/WEARPAD (REF)

# **DETAIL E**

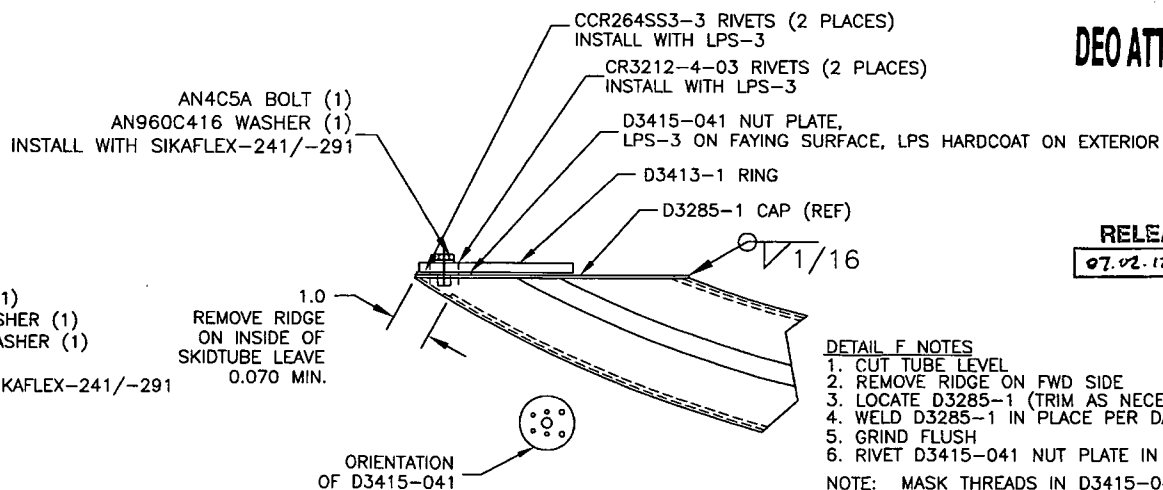
- AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(2 PLACES)  
INSTALL WITH SIKAFLEX-241/-291



0.208 (2 PLACES)  
DRILL PRIOR TO INSTALLING  
D2646 CAP

BORE OUT END OF SKIDTUBE  
TO 0.75 DEPTH AND 0.070 WALL

# **DETAIL F: END FINISHING DETAIL**



ORIENTATION  
OF D3415-041

DEO ATTACHED

RELEASED

07.02.12

# **DETAIL F NOTES**

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

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|         |          |          |                   |  |
|---------|----------|----------|-------------------|--|
| DESIGN  | CP       | DRAWN BY | PH                | <b>DART</b> DART AEROSPACE USA, INC.<br>PORT HADLOCK, WA |
| CHECKED | PH       | APPROVED | PH                | DRAWING NO.<br>D3274                                     |
| DATE    | 06.12.19 | TITLE    | SKIDTUBE ASSEMBLY | REV. D<br>SHEET 4 OF 4<br>SCALE<br>1:3                   |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

|                      |                               |                                  |  |                                |                           |              |
|----------------------|-------------------------------|----------------------------------|--|--------------------------------|---------------------------|--------------|
| DRAWING NO.<br>D3274 | TITLE<br>SKIDTUBE ASSEMBLY    | REV. D                           | DART AEROSPACE USA, INC<br>ENGINEERING ORDER | D.E.O. NO.<br>D3274-D-1        | SHEET NO.<br>SHEET 1 OF 1 | SCALE<br>NTS |
| DRAWN<br><i>UP</i>   | CHECKED<br><i>[Signature]</i> | MFG. APPR.<br><i>[Signature]</i> | APPROVED<br><i>[Signature]</i>               | DE APPR.<br><i>[Signature]</i> |                           |              |
| DATE<br>09.06.17     | DATE<br>09.06.23              | DATE<br>09/06/23                 | DATE<br>09/06/23                             | DATE<br>09.06.23               |                           |              |

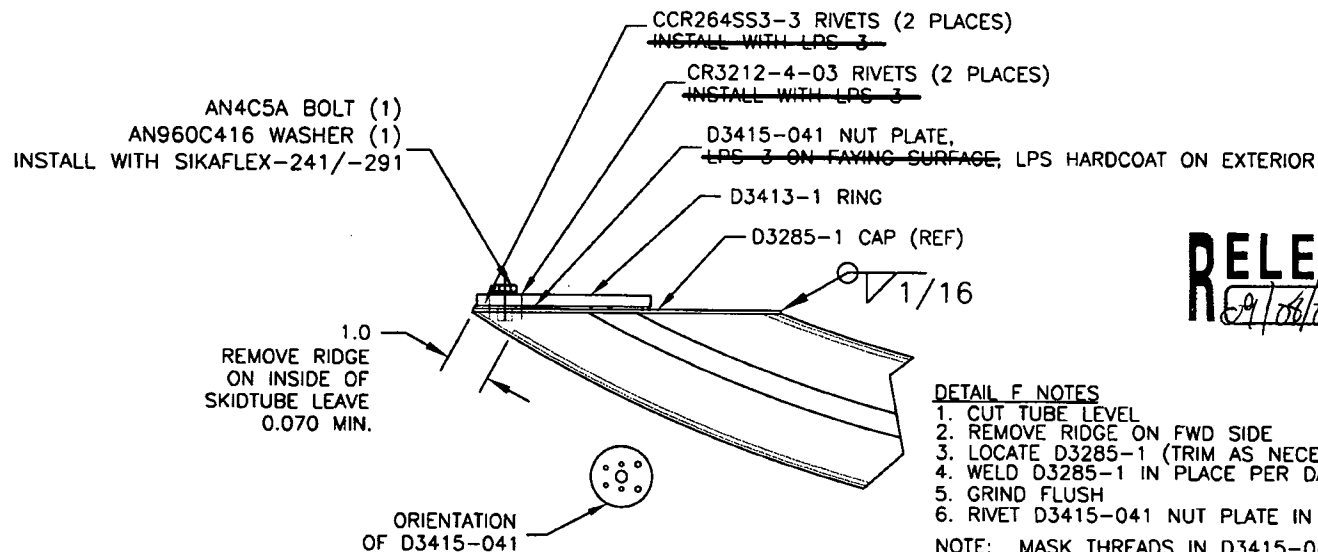
LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: ~~"SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS 3' AFTER FINISH AND INSTALLATION OF INSERTS.~~  
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF  
POWDER COATING WITH MEK DEGREASER."

AMEND DETAIL F AS SHOWN:

*w/o 70467*

### DETAIL F: END FINISHING DETAIL



#### DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

NO. 261

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: B69499  
Part number: D206 642 541  
Description: 206  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminum  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

UNACCEPTABLE

Cracks: pass[☒] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[☒] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier Sal Lunn Date of Test Coupon 11-08-11

Welder Barclay Elliott Date of Test Coupon 11-08-11

The above named individual is qualified in accordance with AWS D17.1.2001 to weld